

**WHAT IS CLAIMED IS:**

- 1           1.       A method for selecting an article of manufacture from a plurality of like articles  
2 of manufacture over a computer network, the plurality of like articles of manufacture having  
3 properties whose actual values are varied due to manufacturing processes, the method  
4 comprising:  
5               entering desired values for one or more of the properties of the article of  
6 manufacture;  
7               transmitting the desired values to a processor programmed to compare each  
8 desired value with the actual value for each respective property of the article of manufacture to  
9 determine whether there is a match between each desired value and the actual value for each  
10 respective property; and  
11               receiving data from the processor indicating that each desired value is matched by  
12 the actual value for each respective property of the article of manufacture.  
13  
14           2.       A method as recited in Claim 1, wherein the step of entering desired values for  
15 one or more of the properties of the article of manufacture includes the step of entering desired  
16 values for one or more of the properties of a particular grade of paper, wherein the properties are  
17 selected from the group comprising caliper, tensile strength, burst strength, tear resistance,  
18 abrasion resistance, picking resistance, fold endurance, ink/water absorptivity, brightness,  
19 opacity, finish, softwood/hardwood content, and pH.  
20  
21           3.       A method as recited in Claim 1, further including the steps of:  
22               entering a description of a converting machine on which the article of  
23 manufacture is intended to be used;  
24               receiving default values, associated with the description of the converting  
25 machine, for one or more of the properties of the article of manufacture; and  
26               selecting the default values as the desired values for the one or more of the  
27 properties of the article of manufacture.

1           4.       A method as recited in Claim 3, wherein the step of entering a description of a  
2       converting machine includes the step of entering a description of a converting machine selected  
3       from the group comprising a printing press, envelope-folding machine, corrugating machine, and  
4       a die-cutting machine.

1           5.       A method as recited in Claim 1, further including the steps of selecting the article  
2       of manufacture and transmitting an offer to purchase the selected article of manufacture to a  
3       product supplier.

1           6.       A method as recited in Claim 5, wherein the step of transmitting an offer to  
2       purchase the selected article of manufacture to a product supplier includes the step of  
3       transmitting a bid for the selected article of manufacture to a product supplier.

1           7.       A method as recited in Claim 5, wherein the step of transmitting an offer to  
2       purchase the selected article of manufacture to a product supplier includes the step of  
3       transmitting an order to purchase the selected article of manufacture to a product supplier.

1           8.       A method as recited in Claim 1, wherein the step of receiving data from the  
2       processor includes the step of receiving data indicating that each desired value is exactly  
3       matched by the actual value for each respective property of the article of manufacture.

1           9.       A method as recited in Claim 1, further including the step of selecting tolerances  
2       for each desired value and transmitting the selected tolerances to the processor, and wherein the  
3       step of receiving data from the processor includes the step of receiving data indicating that the  
4       actual value for each respective property of the article of manufacture is within the selected  
5       tolerances for each desired value.

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1 10. A method for selecting an article of manufacture from a plurality of like articles  
2 of manufacture over a computer network, the plurality of like articles of manufacture having  
3 properties whose actual values are varied due to manufacturing processes, the method  
4 comprising:  
5 acquiring actual values for one or more of the properties of the article of  
6 manufacture;  
7 storing the actual values as part of a database;  
8 transmitting the actual values to a processor programmed to compare each desired  
9 value of a property selected by a purchaser with the actual value for each respective property of  
10 the article of manufacture to determine whether there is a match between each desired value and  
11 the actual value for each respective property; and  
12 receiving an offer from the purchaser to purchase the article of manufacture.

1 11. A method as recited in Claim 10, wherein the step of acquiring actual values for  
2 one or more of the properties of the article of manufacture includes the step of acquiring actual  
3 values for one or more of the properties of a manufacture of a particular grade of paper, wherein  
4 the one or more properties are selected from the group comprising caliper, tensile strength, burst  
5 strength, tear resistance, abrasion resistance, picking resistance, fold endurance, ink/water  
6 absorptivity, brightness, opacity, finish, softwood/hardwood content, and pH.

1 12. A method as recited in Claim 10, wherein the step of transmitting the actual  
2 values to a processor includes the step of transmitting the actual values over the computer  
3 network to the purchaser for processing.

1 13. A method as recited in Claim 10, wherein the step of transmitting the actual  
2 values to a processor includes the step of transmitting the actual values over the computer  
3 network to a distributor for processing.

1           14.     A method as recited in Claim 10, further including the step of processing the  
2     desired values and the actual values with the processor to determine whether there is a match  
3     between each desired value and the actual value for each respective property.

1           15.     A method as recited in Claim 14, further including the step of transmitting data to  
2     the purchaser indicating that each desired value is exactly matched by the actual value for each  
3     respective property of the article of manufacture.

1           16.     A method as recited in Claim 10, further including the step of receiving offers  
2     from additional purchasers to purchase the article of manufacture, wherein the offer received  
3     from the purchaser and the offers received from the additional purchasers include bids for the  
4     article of manufacture.

1           17.     A method as recited in Claim 16, further including the step of determining a  
2     winning bid based on predetermined auction criteria.

1           18.     A method as recited in Claim 10, wherein the step of receiving an offer from the  
2     purchaser includes the step of receiving an order to purchase the article of manufacture.

1           19.     A method as recited in Claim 18, further including the step of transmitting data to  
2     a distributor to fill the order.

1           20.     A method as recited in Claim 10, further including the step of receiving data that  
2     describes how the article of manufacture performed when used for a particular application.

1           21.     A method as recited in Claim 20, wherein the step of receiving data that describes  
2     how the article of manufacture performed when used for a particular application includes the step  
3     of receiving data that describes how a manufacture of a particular grade of paper performed  
4     when processed on a converting machine and further including the step of correlating the  
5     performance data with a description of the converting machine.

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1           22.     A computer system for selecting an article of manufacture from a plurality of like  
2 articles of manufacture over a computer network, the plurality of like articles of manufacture  
3 having properties whose actual values are varied due to manufacturing processes, the computer  
4 system comprising:

5                   a memory for storing actual values for properties of the article of manufacture;

6                   a processor in communication with the memory, wherein the processor is  
7 operative to

8                   receive the actual values for the properties of the article of manufacture;

9                   store the actual values as part of a database in the memory;

10                   receive a desired value from a purchaser for one or more properties of the  
11 article of manufacture;

12                   determine whether there is a match between each desired value and the  
13 actual value for each respective property of the article of manufacture by comparing each desired  
14 value with the actual value for each respective property;

15                   transmit data to the purchaser indicating that the desired values for the one  
16 or more properties are found in the article of manufacture; and

17                   receive an offer from the purchaser to purchase the article of manufacture.

18           23.     A computer system as recited in Claim 22, wherein the actual values for the  
19 properties of the article of manufacture are measured during the manufacturing processes.

20           24.     A computer system as recited in Claim 22, wherein the processor is further  
21 operative to receive actual values for properties of a manufacture of a particular grade of paper,  
22 wherein the properties are selected from the group comprising caliper, tensile strength, burst  
23 strength, tear resistance, abrasion resistance, picking resistance, fold endurance, ink/water  
24 absorptivity, brightness, opacity, finish, softwood/hardwood content, and pH.

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1           25.     A computer system as recited in Claim 22, wherein the processor is further  
2     operative to receive offers to purchase the article of manufacture from additional purchasers,  
3     wherein the offer received from the purchaser and the offers received from the additional  
4     purchasers include bids for the article of manufacture.

1           26.     A computer system as recited in Claim 25, wherein the processor is further  
2     operative to determine a winning bid based on predetermined auction criteria.

1           27.     A computer system as recited in Claim 22, wherein the processor is further  
2     operative to transmit data to the purchaser indicating that each desired value is exactly matched  
3     by the actual value for each respective property of the article of manufacture.

1           28.     A computer system as recited in Claim 22, wherein the processor is further  
2     operative to transmit data to the purchaser indicating that the actual value for each respective  
3     property of the article of manufacture is within tolerances selected by the purchaser for each  
4     desired value.

1           29.     A computer system as recited in Claim 22, wherein the offer is an order for the  
2     purchase of the article of manufacture and wherein the processor is further operative to transmit  
3     the order to a distributor so that the distributor can fill the order.

1           30.     A computer system as recited in Claim 22, wherein the processor is further  
2     operative to receive data that describes how the article of manufacture performed when used for  
3     a particular application.